

CLAIMS

What is claimed is:

1. A portable cooler, for selectively maintaining a variety
5 of food and beverage items at a low temperature, comprising:

an insulated container having a storage compartment, a lid, and at least one hinge which pivotally attaches the lid to the storage compartment, the storage compartment having at
10 least one wall, a bottom, a top, and an opening in proximity to the top, said at least one wall, the bottom, and the lid together defining an interior volume off the portable cooler, each of said at least one wall having an externally oriented surface facing onto the exterior of the portable cooler, and
15 an internally oriented surface facing onto the interior of the portable cooler, the insulated container having an open position wherein the lid has been swiveled upon the at least one hinge away from the storage compartment, and a closed position wherein the lid has been swiveled upon the at least
20 one hinge toward the storage compartment in order to seal the opening at the top of the storage compartment;

a cooling device for cooling the interior volume of the insulated container, having an associated air outlet vent
25 extending through one of the at least one walls for dissipating heat extracted from the interior volume of the insulated container during operation of the cooling device;

a display panel positioned upon the insulated container, for enabling the user to control the operation of the cooling device, having an activation button for selectively powering the cooling device, a thermistor for sensing the temperature within the interior volume of the insulated container, a temperature display in electrical communication with the thermistor of the cooling device for displaying the temperature as sensed by the thermistor; and

a battery compartment for selective containment therein of at least one battery for selectively powering the cooling device.

2. The portable cooler as recited in claim 1, wherein said display panel has a temperature control knob for varying the temperature at which the cooling device is selectively activated, said temperature control knob capable of rotating in two opposing directions

3. The portable cooler as recited in claim 2, wherein the display panel further has a set temperature mode, an existing temperature mode, and a temperature display button for toggling between the two modes, wherein while in the existing temperature mode, the user is able to view the temperature of the interior volume of the insulated container upon the temperature display, and wherein while in the set temperature

mode, the user is able to set the temperature above which the cooling device will be activated by rotating the temperature control knob, wherein rotation of the temperature control knob in one of the opposing directions raises the temperature above which the cooling device will be activated, and wherein rotation of the temperature control knob in the other of the two opposing directions lowers the temperature above which the cooling device will be activated.

4. The portable cooler as recited in claim 3, wherein the cooling device is positioned within the storage compartment of the insulated container.

5. The portable cooler as recited in claim 4, wherein the insulated container is substantially rectangular, having four walls, and a substantially rectangular opening in proximity to the top, wherein the four walls, the bottom, and the lid, together define the interior volume of the portable cooler, and wherein each of the walls has an externally oriented surface facing onto the exterior of the portable cooler, and an internally oriented surface facing onto the interior of the portable cooler.

6. The portable cooler as recited in claim 5, wherein the display panel is positioned upon an internally oriented surface of one of the walls.

7. The portable cooler as recited in claim 6, wherein the externally oriented surfaces of two opposing walls of the insulated container each have a handle attached thereunto, for enabling the user to easily transport the portable cooler
5 between locations.

8. The portable cooler as recited in claim 7, wherein the temperature display is a liquid crystal display.

10 9. The portable cooler as recited in claim 8, wherein the cooling device is a freon-based refrigeration system.

10. A method of selectively maintaining a variety of food and beverage items at a low temperature, said method for use by
15 an existing user, utilizing a portable cooler which is easily transported between locations, said portable cooler having an insulated container having a storage compartment and a lid pivotally attached to the storage compartment, said insulated container having an interior volume, said storage compartment
20 having a bottom, said portable cooler further having a cooling device having an associated air outlet vent, said portable cooler further having a display panel having a set temperature mode, an existing temperature mode, and a temperature display button for toggling between the two
25 modes, said display panel further having a temperature control knob having two opposing directions in which it may be rotated, said display panel further having a temperature

display for providing a numerical indication of the temperature of the interior volume of the insulated container, said display panel further having an activation button, said portable cooler further having a battery compartment having at least one battery having a storage of energy, said insulated container having handles attached thereunto, said method for use in conjunction with an existing horizontal support structure, said method comprising the steps of:

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carrying the portable cooler between locations by the handles of the insulated container;

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supporting the bottom of the portable cooler on the horizontal support structure;

placing at least one of the items to be cooled within the interior volume of the insulated container;

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closing the lid;

powering the cooling device by the at least one battery by depressing the activation button in order to cool the interior volume of the insulated container;

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setting the temperature above which the cooling device is activated by pressing the temperature display button until

the temperature is in the set temperature mode, and then by rotating the temperature control knob in one of two opposing directions;

5 determining the temperature of the interior volume of the insulated container by the user by pressing the temperature display button until the display panel is in the existing temperature mode, and by viewing the numerical indication of temperature upon the temperature display;

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 dissipating the heat extracted from the air during the cooling process from the air outlet vent;

 opening the lid;

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 removing at least one of the items from the interior volume of the insulated container after it has been cooled; and

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 replacing the at least one battery which selectively powers the cooling device with a new battery when the store of energy within the battery becomes substantially depleted.